



OXFORD JOURNALS
OXFORD UNIVERSITY PRESS

The General Glut Controversy Reconsidered

Author(s): Thomas Sowell

Source: *Oxford Economic Papers*, Nov., 1963, New Series, Vol. 15, No. 3 (Nov., 1963), pp. 193-203

Published by: Oxford University Press

Stable URL: <https://www.jstor.org/stable/2661714>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



Oxford University Press is collaborating with JSTOR to digitize, preserve and extend access to *Oxford Economic Papers*

JSTOR

THE GENERAL GLUT CONTROVERSY RECONSIDERED¹

By THOMAS SOWELL

ONE of the pitfalls in interpreting an economist of the past is the tendency to read back into him the concerns of latter-day economics, and perhaps even the theories of a particular modern economist. Malthus has frequently been taken as a forerunner of Keynes, and his controversy with Ricardo on general gluts has been regarded as an anticipation of modern disputes in monetary- and business-cycle theory. Even where the substantive propositions of Malthus are shown to be sharply in conflict with Keynesian theory,² the question is not raised whether the two theories were in fact theories about the same thing.

Malthus had an elaborate theory of economic development, to which was appended a sketchy corollary on temporary unemployment, which has since been greatly magnified in the light of its supposed affinity to Keynesianism. The whole development theory, in which demand plays an important role, has been taken as a business-cycle theory, despite Malthus's explicit and repeated statements³ that he was pursuing the question of the progress of the wealth of nations—'the grand object of all enquiries in Political Economy'.⁴

Some of the difficulties which Malthus and Ricardo had in understanding each other, in this and other controversies, resulted from their pursuing different objects by different means. While Malthus was concerned with dynamic studies of economic development, Ricardo set forth his purpose as the study of distributive shares⁵ and his method as comparative statics.⁶ Malthus and Ricardo themselves recognized that in addition to their specific theoretical differences, they had different views of the nature and object of political economy, but they apparently did not see the extent to which the former were the consequences of the latter, and how even the definitions over which they quarrelled resulted from each equipping

¹ I wish to express my gratitude for critical comments by Professor George J. Stigler of the University of Chicago, who, of course, bears no responsibility for the conclusions or shortcomings of this paper.

² B. A. Corry, 'Malthus and Keynes—A Reconsideration', *Economic Journal* (Dec. 1959), pp. 717–24.

³ Malthus's avowed purpose was to discover the 'stimulants to the continued creation and progress of wealth' (*Principles of Political Economy*, 2nd ed., p. 310). Five of the ten section headings in his long final chapter end with the identical phrase, 'continued increase of wealth', which also occurs in the text (pp. 411, 420, 425) along with such phrases as 'further accumulation' (398), 'further progress of national wealth' (388), &c.

⁴ *The Works and Correspondence of David Ricardo*, ed. P. Sraffa, vol. vii, p. 122.

⁵ *Ibid.*, vol. i, p. 5; vol. viii, p. 278.

⁶ *Ibid.*, vol. viii, p. 278.

himself with constructs facilitating the movement of arguments headed in different directions and crossing only at isolated points.

I. The Methodological Background

Malthus approached economics in an intuitive, unsystematic manner, rejecting abstract theories that were 'only true *caeteris paribus*'. To Malthus the analytic separation of causes was tantamount to denying that causes were in fact interacting. It represented 'simplification',¹ which he decried in theoretical economists, and a failure to appreciate the obvious complexity of the real world, of which he naïvely informed Ricardo repeatedly. Ricardo's appreciation of this complexity showed itself more in the care with which he specified the conditions under which his propositions were to be true than in the simple reiteration of the fact. He observed that Malthus had said that economics was not a strict science like mathematics, and 'therefore he thinks he may use words in a vague way, sometimes attaching one meaning to them, sometimes another . . .'.²

The differing approaches of the two men appear in their respective conceptions of normality, or the 'natural' as they each called it. In Ricardo this was an analytic concept, referring to an equilibrium position of wages, prices, &c., deviations from which called forth economic reactions. In Malthus it was a descriptive term, referring to what was usual historically. Thus, for example, Malthus could object to Ricardo's definition of the 'natural price' of labour as a static-population wage (despite the consonance of this with his own population theory), and call this 'a most unnatural price'.³ He failed entirely to see that the purpose was analytical, and that Ricardo did 'not mean the usual price, but such a price as is necessary to supply constantly a given demand'.⁴ Ricardo clearly recognized that wages were not in fact constant at that level.⁵

The Malthusian concern for an historical rather than an analytical normality led him to lay much greater stress on disequilibrium situations which, he maintained, might be of long duration, while neglecting equilibrium situations which might be rare. Malthus declared that theoretical writers were too apt to overlook 'intervals' but that 'eight or ten years, recurring not unfrequently, are serious spaces in human life'.⁶ Ricardo admitted that 'I put these immediate and temporary effects quite aside, and fix my whole attention on the permanent state of things which will

¹ *The Works and Correspondence of David Ricardo*, vol. vi, p. 82; also Thomas Robert Malthus, *Principles of Political Economy*, 2nd ed., p. 4.

² *The Works and Correspondence of David Ricardo*, vol. viii, p. 331.

³ T. R. Malthus, *Principles of Political Economy*, 2nd ed., p. 223; id., *Definitions in Political Economy* (New York, 1954), p. 60.

⁴ *The Works and Correspondence of David Ricardo*, vol. ii, p. 227.

⁵ *Ibid.*, vol. i, pp. 94–95.

⁶ T. R. Malthus, *Principles*, p. 437.

result from them'.¹ Malthus was more oriented toward policy, Ricardo toward principles. This was in part a difference of approach, but there was also a substantive theory underlying Ricardo's position. Because *laissez-faire* was for him the best policy, he saw no need for the economist to make policy, except in the area of taxation where governmental interference with the economy was unavoidable, and hence should be rendered as innocuous as possible, so as to leave allocation as nearly approximating *laissez-faire* conditions as possible.²

While Malthus has been pictured, with some justice, as a crude and muddled thinker, this would not be a valid general characterization of him. On some points his subtlety and insight clearly surpassed Ricardo's. For example, the Ricardian determination of value by cost of production was seen by Malthus as only a special case of the more general determination by supply and demand, the latter principle holding good for monopolized as well as competitively produced commodities,³ and in the 'intervals' of (long-run) disequilibrium as well as in static equilibrium.⁴ While supply and demand in Ricardo refer exclusively to quantities supplied and demanded,⁵ in Malthus the 'extent' (quantity) of demand is sharply distinguished from the 'intensity' of demand,⁶ and it is the latter, together with the 'conditions of the supply', which determines value. Malthus's examples clearly imply a schedule concept.⁷

But for present purposes the relative merits of the Ricardian and Malthusian conceptions of supply and demand are far less important than the simple fact that they were different conceptions. In the light of that difference it is not surprising that the proposition that supply creates its own demand had very different meanings to each of them. The doctrine that Malthus attacked was not the doctrine that Ricardo defended, though there was only a belated and incomplete recognition of this fact on both sides.

II. Economic Development

For Malthus the great obstacle to economic development was 'indolence' or, in a different frame of reference, insufficient desire for further consumption. The fear of indolence was explicitly a part of Malthus's objections to so-called 'neo-Malthusian' birth-control efforts:

If it were possible for each married couple to limit by a wish the number of their children, there is certainly reason to fear that the indolence of the human race would

¹ *The Works and Correspondence of David Ricardo*, vol. vii, p. 120.

² *Ibid.*, vol. viii, pp. 101, 132-3.

³ T. R. Malthus, *Principles*, pp. 70-71.

⁴ *Ibid.*, pp. 65 n.-66 n., 72; T. R. Malthus, *Definitions in Political Economy*, p. 221; *id.*, *The Measure of Value* (New York, 1957), p. 44; *id.*, *An Investigation of the Cause of the Present High Price of Provisions* (Toronto, 1949), p. 7.

⁵ *The Works and Correspondence of David Ricardo*, vol. vi, p. 129.

⁶ T. R. Malthus, *Principles*, pp. 64.

⁷ *Ibid.*, pp. 65-69.

be very greatly increased, and that neither the population of individual countries, nor of the whole world, would ever reach its natural and proper extent.¹

Similarly, Malthus opposed equalitarian social systems on grounds that they lack 'those stimulants to exertion which can alone overcome the natural indolence of man and prompt him to the proper cultivation of the earth and the fabrication of . . . conveniences and comforts . . .'.² Whatever the individuals concerned might prefer, society should maintain that degree of economic development and population increase which Malthus regarded as 'natural' or 'proper'. Ricardo's objections to casting an economist in this despotic role went unheeded. Malthus declared, long before John Stuart Mill's celebrated statement, that labour-saving machinery had not in fact lightened the work of labourers,³ though he was by no means as dismayed over this as Mill. The human tendency to substitute leisure for output at the margin was a crucial danger to be guarded against. Malthus's policy positions with respect to the labouring, capitalist, and land-owning classes were largely determined by this issue in the context of economic development.

Malthus apparently had little hope of inspiring workers to maintain their exertions out of a desire for more consumer goods, for the spur of necessity was invoked for them:

It is the want of *necessaries* which mainly stimulates the labouring classes to produce luxuries; and were this stimulus removed or greatly weakened, so that the necessaries of life could be obtained with very little labour, instead of more time being devoted to the production of conveniences, there is every reason to think that less time would be so devoted.⁴

For entrepreneurs the desire for emulation of the standard of living of landlords and others living on 'unearned' income could serve as an incentive to greater output, beyond the point where the (non-emulative) utility of goods would have ceased to compensate the disutility of work.⁵ The weighing of goods against work at the margin does not, however, enter the calculations of those living on 'fixed money revenue, obtained by inheritance, or with little or no trouble',⁶ and their uninhibited spending tends to keep the customary standard of living higher than it would be otherwise. Moreover, the taxes and other transfer payments to them from the producing classes make it necessary for the latter to work harder in order to reach this standard.⁷ Thus in the Malthusian system the income of unproductive consumers is not an economic rent, but is rather

¹ Malthus, quoted in Francis Place, *Illustrations and Proofs of the Principle of Population*, ed. N. E. Himes (London, 1933), Appendix A, p. 286.

² T. R. Malthus, *The Principle of Population* (London, 1933), vol. ii, p. 25.

³ *Ibid.*, p. 23.

⁴ T. R. Malthus, *Principles of Political Economy*, 2nd ed., p. 334.

⁵ *Ibid.*, pp. 379, 355, 401.

⁶ *Ibid.*, p. 379.

⁷ *Ibid.*, p. 409.

the necessary supply price of productive efforts, though not the efforts of the recipients.

The Malthusian aims and policies as sketched were superimposed on the Ricardian model of progress toward the stationary state, in circumstances of rising cost functions in agriculture, horizontal or declining cost functions in manufacturing, an increasing population, declining profits, &c. Two additional assumptions of the Malthusian system bear on the problem of depression and unemployment. The first is a lag of population growth behind the secularly growing demand for labour, and the second a downward rigidity of wages.

The time-lag necessary for a new generation to grow up creates a short-run inelasticity of supply of labour, with higher-than-subsistence wages resulting from increasing output and attendant rising demand for labour. As long as output continues to grow, the same situation continues in successive time periods, and the Malthusian historical 'natural' wage remains above the Ricardian analytical 'natural' subsistence wage. Substantively, Ricardo subscribed to this much of the Malthusian wage theory, which was descended from Adam Smith. When economic development slows down or stops, the labour supply catches up with the demand and wages fall toward the long-run equilibrium level—or rather, in Malthus, the wages fund *per capita* falls and unemployment results in the short run, owing to downward wage rigidity. Here Ricardo opposed Malthus. Insufficient demand for labour 'must mean a diminishing reward for the labourer, and not a diminishing employment of him'.¹ For Malthus, however, unemployment was 'a most painful but almost unavoidable preliminary to a fall in the money wages of labour . . .'.²

What is crucial here is that in the Malthusian system the cessation of growth is the occasion of unemployment among a population which, 'under its former impulse',³ has increased beyond the point at which it can be employed at prevailing wages. Therefore, 'this stagnation must throw the rising generation out of employment'.⁴ The problem is one of 'employing an increasing population' under these circumstances.⁵

Diagrammatically (Fig. 1), increasing demand (D_1, D_2, D_3) for labour over time encounters inelastic supply curves (S_1, S_2, S_3, S_4) in each time period, although the long-run supply curve of labour (S) is infinitely elastic at the subsistence wage (W_S). As long as the demand curve continues to shift to the right at a sufficient rate, the actual wage level (W_A) exceeds the subsistence level. When the increase of output ceases and the demand curve for labour becomes stationary, at D_3 for example, the labour

¹ *The Works and Correspondence of David Ricardo*, vol. ix, p. 25.

² T. R. Malthus, *Principles of Political Economy*, 2nd ed., p. 397.

³ *Ibid.*, p. 417.

⁴ *The Works and Correspondence of David Ricardo*, vol. ix, p. 20.

⁵ *Ibid.*, p. 10.

force will continue to increase, and with downward wage rigidity in the short run there will be unemployment of all workers in excess of P_3 . Unemployment will be reduced only as wages are slowly forced down along D_3 to the subsistence level, where the long-run equilibrium level of the labour force will be P'_3 .

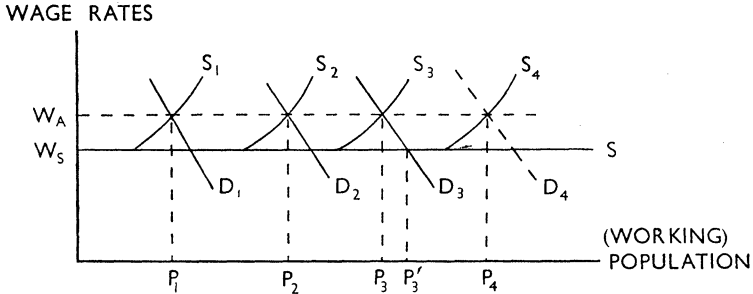


FIG. 1

A continuing shift of the demand curve for labour to the right (D_4) would be necessary to maintain full employment at the historically prevailing wage. For this Malthus looked to increased demand for output. Deficient demand in Malthus refers to demand which is deficient for the purpose of maintaining the continuity of economic development, not deficient for the purpose of clearing the market. It is ‘demand for future produce’¹ which is relevant to the Malthusian thesis, as he attempted to point out to Ricardo. Demand is measured by Malthus in terms of its ‘labour command’² or in Keynesian wage-units.

III. Savings, Demand, and Say’s Law

Malthus considered his theory of short-run unemployment to be a refutation of Say’s law, or ‘Mr. Mill’s proposition’ as he called it.³ This polemical use of his theory contributed to its being misunderstood by Ricardo (and later Keynes). Malthus did not claim that consumption would be insufficient for production, but that each would be insufficient for full employment of an increasing population under the conditions assumed.

The proposition that supply creates its own demand was interpreted by Malthus in his own (schedule) sense of these terms—that increased productivity leads to proportionally increased demand and actual realized production. Malthus opposed ‘those who think that the power of production is the only element of wealth, and, who consequently infer that if the means of production be increased, wealth will certainly increase in proportion’.³ Say’s law was for Malthus an assertion that ‘mankind always produces

¹ T. R. Malthus, *Principles of Political Economy*, p. 417.

² *Ibid.*, pp. 82, 98, 99, 363; *id.*, *Definitions in Political Economy*, p. 210 n.

³ T. R. Malthus, *Principles of Political Economy*, 2nd ed., p. 419.

and consumes as much as they have the power to produce and consume'.¹ He thought this proposition true only of agriculture, where population increase would automatically follow a rise in productivity and thereby lead to an increase in absolute production and consumption. Speaking of Say he remarked: 'I think the source of his error is, that he does not properly distinguish between the necessaries of life and other commodities,—the former create their own demand the latter not.'² Ironically, Say set forth this same proposition, distinguishing the necessities of life from other goods, though, of course, without any connexion with his law.³

In order to refute what he conceived to be the position of the proponents of Say's law, Malthus examined in turn productivity increases, savings increases, and other variables, each being considered (according to the respective chapter sub-titles) for its possible role 'as a stimulus to the continued increase of wealth'.⁴ He found them all lacking for this purpose.⁵ Ricardo (and later Keynes) understood Malthus to be considering savings, for example, as a direct cause of gluts by the simple mechanism of reducing demand, and pointed out repeatedly that savings (always invested in both Malthus and Ricardo) do not decrease demand but only transfer it.

When Malthus finally realized, late in the controversy, how Ricardo was interpreting his position, he flatly declared: 'I don't wish at all to deny that some persons or others are entitled to consume all that is produced; but the grand question is whether it is distributed in such manner between the parties concerned as to occasion the most effective demand for future produce. . . .'⁶ The question to which Malthus addressed himself was not the clearing of the market at a given moment, but the maintenance of the on-going process of economic growth.

While Ricardo greatly misunderstood Malthus, the latter's prior misunderstanding of Say's law was responsible for much of the fruitless controversy. As Ricardo wrote to James Mill:

. . . for what are all his attacks on Say and on me, surely not because we have said that in all cases there would be motives sufficient to push production to its utmost extent, but because we have said, that, when produced, commodities would always find a market. . . .⁷

¹ *Ibid.*, p. 424.

² *The Works and Correspondence of David Ricardo*, vol. vi, p. 168.

³ J. B. Say, *A Treatise on Political Economy* (Philadelphia, 1834), p. 326. Cf. T. R. Malthus, *Principles of Political Economy*, 2nd ed., pp. 140, 143, 150, 161, 180, 195-6; id., *The Nature and Progress of Rent* (Baltimore, 1903), p. 15.

⁴ See p. 193, n. 3. It would be hard to find another instance where a writer's intentions were so often reiterated in the same phrases and so consistently misconstrued.

⁵ When he examined savings, it was to trace the path of economic adjustment to a temporary increment of saving (*Principles*, pp. 314-15).

⁶ *The Works and Correspondence of David Ricardo*, vol. ix, p. 10.

⁷ *Ibid.*, p. 13; vol. ii, pp. 314, 337.

To Malthus he wrote:

You are right in supposing that I have understood you in your book not to profess to enquire into the motives for producing, but into the effects which would result from abundant production. You say in your letter 'We see in almost every part of the world vast powers of production which are not put into action and I explain this phenomenon by saying that from the want of the proper distribution of the actual produce adequate motives are not furnished to continued production.' If this had been what I conceived you to have said I should not have a word to say against you, but I have rather understood you to say that vast powers of production are put into action and the result is unfavourable to the interests of mankind. . . .¹

Malthus, in a somewhat irritated reply dated only a week after Ricardo's letter, declared that 'I almost despair of being able to explain myself' if Ricardo could read such a meaning into his chapter 'On the Progress of Wealth':

Surely I have no where said, as you seem to intimate, that people will continue to produce without a motive; because I expressly give as the reason for the scanty produce of the world, the want of sufficient motives to produce . . . a great temporary saving, commencing when profits were sufficient to encourage it, might occasion such a division of produce as would leave no motive to further increase of production. And if a state of things in which for a time there is no motive to a further increase of production be not properly denominated a stagnation, I do not know what can be so called; particularly as this stagnation must inevitably throw the rising generation out of employment. We know from repeated experience that the money price of labour never falls till many workmen have been for some time out of work.²

In addition to assuming that the elasticity of supply of investment was greater than the short-run elasticity of supply of labour,³ Malthus also seemed to assume that investors' decisions were based on existing or 'normal' rates of return, rather than on an accurate appraisal of prospective profitability. These assumptions, taken together, made the rapidity of economic development a matter of serious concern. With lagging investment reaction to declining profitability, the equilibrium level of investment and output was likely to be overshoot in a rapidly developing economy, leading to excess production followed by excess labour (at high and downwardly rigid wage rates).⁴ A less rapid economic development was for Malthus a more enduring one. To achieve this it was necessary that increasing property income have additional outlets available in 'unproductive consumption', rather than going automatically into investment until disaster struck. This would assure investors an 'adequate share' of rising income to encourage them to maintain the continuity of development and full employment.⁵

¹ *The Works and Correspondence of David Ricardo*, vol. ix, p. 15. ² *Ibid.*, p. 20.

³ *Loc. cit.*; T. R. Malthus, *Principles of Political Economy*, 2nd ed., pp. 280, 319-20; *id.*, *The Measure of Value*, p. 57.

⁴ *The Works and Correspondence of David Ricardo*, vol. ix, p. 20; T. R. Malthus, *Principles of Political Economy*, 2nd ed., p. 326.

⁵ *The Works and Correspondence of David Ricardo*, vol. ix, p. 20.

Characteristically, Malthus used the term 'glut' and 'stagnation' loosely as interchangeable descriptions of a temporary standstill in economic growth.¹ But this use of the word 'glut' to denote a fully stocked (not overstocked) market was inconsistent with his more stringent definition of glut as a level of output unsustainable in the light of rising labour costs.² A glut in the second and more usual sense of overproduction was not a necessary consequence of his stagnation thesis alone, but required the additional theory and assumptions of investment-lag and redistribution of income from investors to workers. Ricardo could apparently bring himself to accept the short-run stagnation thesis,³ though not the additional propositions on general gluts.

The role of money in the Malthusian system has sometimes been given a Keynesian interpretation which is not warranted. Malthus did deal with a 'monetary economy', as Keynes said, in contrast to Ricardian 'real' analysis.⁴ But Malthus argued simply that real analysis was descriptively untrue,⁵ without attempting to show it to be analytically fallacious. Malthus's *Principles* contained no systematic treatment whatever of money. Ironically, J. B. Say did have a systematic treatment of money,⁶ and even referred to the depressing effect of idle balances accumulating beyond the needs of the transactions motive.⁷

IV. Summary and Conclusion

Ricardo and Malthus each tended to interpret the other's words in his own sense, leading to more than one polemical comedy of errors. For example, Malthus was concerned lest the short-run elasticity of supply of capital combined with the short-run inelasticity of supply of labour should lead, in a growing economy, to rising wage rates and declining returns on investment which would bring economic growth to an abrupt halt when a lagged disinvestment took place. In the wake of this, labour costs would keep capital idle while unemployment among the workers would prevent their benefiting from the high and downwardly rigid wage rates. For

¹ *Ibid.*, p. 10.

² T. R. Malthus, *Definitions in Political Economy*, pp. 247, 242.

³ *The Works and Correspondence of David Ricardo*, vol. ix, p. 131; vol. x, pp. 408–9.

⁴ J. M. Keynes, *Essays in Biography* (New York, 1951), p. 116. 'Real' meant something very different in Ricardo from what it means in modern economics. Ricardian 'real wages', for example, have nothing in common with modern real wages except that both are non-monetary.

⁵ T. R. Malthus, *Principles of Political Economy*, 2nd ed., pp. 316, 324 n.; *id.*, *Definitions in Political Economy*, pp. 54, 60.

⁶ J. B. Say, *A Treatise on Political Economy*, ch. 21.

⁷ J. B. Say, *Letters to Thomas Robert Malthus on Political Economy and Stagnation of Commerce* (London, 1836 [originally London, 1821]), pp. 45 n.–46 n. Malthus observed that Say here 'appears to me to give up completely the practical part of the question'. George William Zinke, 'Six Letters from Malthus to Pierre Prévost', *The Journal of Economic History*, November 1942, p. 180.

Malthus there was not the neat inverse relationship between wages and profits which existed in the Ricardian system. Ricardo, however, understood Malthus to refer to too large a saving in a comparative statics sense—i.e. that equilibrium savings in time period II would exceed equilibrium savings in time period I by a large amount. Ricardo could see no danger in this situation, and repeatedly demonstrated why there was none, as if this were the issue.

Similarly, Ricardo could see no point in Malthus's desire to increase the 'value' rather than the 'quantity' of aggregate output.¹ Value for Ricardo was cost of production and quantity was equilibrium quantity. Clearly there was no reason to increase the cost of production of output. Value for Malthus was utility or 'estimation',² and a rising utility of aggregate output was necessary for maintaining the pace of economic growth. More of the same commodities would lead to problems of declining marginal utility and substitution of leisure for potential output as productivity increased. In the context of this concern, it is easy to understand Malthus's repeated statements that the important question in value theory was not the relationship of commodities to each other, but the relationship of commodities as a whole to human desires.³ International trade was important primarily because it introduced new commodities with a higher marginal utility, which tended to maintain the process of development.⁴ Money prices, while playing no causal role in the Malthusian system, were significant to Malthus as indicators of utility or 'estimation'.⁵ Ricardo saw in international trade simply a means of producing things more efficiently, and was so concerned to affirm that money was only a 'veil' that he overlooked Malthus's real reasoning and attacked a stereotyped fallacy for which he had a pre-existing answer.

The utility problem which occupied Malthus did not arise in the Ricardian comparative statics model. If the utility of an increment of production were insufficient to induce its production, that increment would not exist in equilibrium and would not be a subject of discourse.

Many of the Malthusian problems were excluded by definition from the Ricardian system. Ricardo could demonstrate repeatedly that various situations described by Malthus were impossible (in equilibrium), while Malthus argued that they were not only possible but actual (disequilibrium) situations occurring in the real world. While the general glut

¹ *The Works and Correspondence of David Ricardo*, vol. i, pp. 128, 264, 319; vol. ii, pp. 405, 373. Cf. T. R. Malthus, *Principles of Political Economy*, 2nd ed., p. 393, 396, 429.

² T. R. Malthus, *Principles of Political Economy*, 2nd ed., pp. 300, 361; id., *Definitions in Political Economy*, pp. 207–8, 235.

³ *Ibid.*, p. 317; T. R. Malthus, *The Measure of Value*, p. 19; *The Works and Correspondence of David Ricardo*, vol. vi, p. 132.

⁴ T. R. Malthus, *Principles of Political Economy*, 2nd ed., pp. 359, 388.

⁵ *Ibid.*, pp. 393–4; T. R. Malthus, *Definitions in Political Economy*, pp. 166, 178–9.

controversy was not a forerunner of modern economic debates in terms of its substantive issues, it was in terms of its general pattern of mutual failure to come to grips with opposing arguments.

Harvard University, Washington, D.C.